

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1-6. (Canceled)

7. (Currently Amended) A heat exchanger comprising:

a first heat dissipation mechanism having a first heat dissipation capacity;
a second heat dissipation mechanism having a second heat dissipation capacity;
a non-branched variable thermal conductivity heat pipe having a first portion physically coupled to a heat generating component, a second portion physically coupled to the first heat dissipation mechanism, and a third portion separated from the first portion and the second portion by a limited conductivity portion and physically thermally coupled to the second heat dissipation mechanism.

8. (Currently Amended) The heat exchanger of claim 7 wherein the non-branched variable thermal conductivity heat pipe has a first thermal path with a first thermal conductivity which couples the heat generating component to the first heat dissipation mechanism and has a second thermal path with a second thermal conductivity which couples the heat generating component to the second heat dissipation mechanism and wherein the first thermal conductivity is at least twice the second thermal conductivity and the first heat dissipation mechanism is an active heat dissipation mechanism.

9. (Previously Amended) The heat exchanger of claim 8 wherein the heat generating component is a processor and wherein the first thermal conductivity is approximately four times the second thermal conductivity.

10. (Previously Amended) The heat exchanger of claim 7 wherein the first heat dissipation mechanism is an active heat dissipation mechanism that is enabled depending on at least a temperature of the heat generating component.

11. (Previously Amended) The heat exchanger of claim 7 wherein the first heat dissipation mechanism is a fan based heat exchanger and wherein the second heat dissipation mechanism is a thermally conductive plate beneath and substantially parallel to a keyboard.

12. (Currently Amended) The heat exchanger of claim 7 wherein the limited conductivity portion is a narrowed portion of the non-branched variable thermal conductivity heat pipe.

13-16. (Canceled)

17. (Currently Amended) A system comprising:

an electronic component;

a non-branched variable thermal conductivity heat pipe having a first portion and a second portion separated by a throttling portion, the electronic component being physically coupled to the first portion; and

a first heat dissipation mechanism physically coupled to the first portion of the non-branched variable thermal conductivity heat pipe; and

a second heat dissipation mechanism physically coupled to the second portion of the non-branched variable thermal conductivity heat pipe.

18. (Original) The system of claim 17 wherein the first heat dissipation mechanism is a fan based heat exchanger including a fan and a plurality of fins which are directly welded to the heat pipe.

19. (Currently Amended) The system of claim 18 wherein said electronic component is coupled to said first portion of said non-branched variable thermal conductivity heat pipe.

20. (Currently Amended) The system of claim 18 wherein the limited conductivity portion is a narrowed portion of the non-branched variable thermal conductivity heat pipe.

21. (Original) The system of claim 18 wherein the second heat dissipation mechanism is a heat dissipation plate affixed beneath and substantially parallel to a keyboard.

22-26. (Canceled)

27. (Currently Amended) An apparatus comprising:

at least one electronic component;

a non-branched heat pipe having a limited conductivity portion, the heat pipe having a first portion physically coupled to the at least one electronic component;

a fan based heat exchanger physically coupled to a second portion of the heat pipe;

and

a metallic plate physically coupled to a third portion of the heat pipe and separated from the first portion that is connected to the at least one electronic component by the limited conductivity portion of the non-branched heat pipe.

28. (Original) The apparatus of claim 27 wherein the metallic plate comprises a plate substantially beneath a keyboard.

29. (Currently Amended) The apparatus of claim 27 wherein said limited thermal conductivity portion of said non-branched heat pipe comprises a narrowed portion of said heat pipe.

30. (Original) The apparatus of claim 28 wherein the metallic plate comprises a portion of a thermally enhanced keyboard.

31. (Currently Amended) The apparatus of claim 27 wherein said electronic component is a processor and is coupled to said first portion of said non-branched heat pipe.

32. (Previously Amended) The apparatus of claim 27 wherein the limited conductivity portion is narrowed.